Course Syllabus

Department: Environmental Conservation and Horticulture

Date: February 8, 2012

I. Course Prefix and Number: BIO 245/CON 210

Course Name: Field Natural History

Credit Hours and Contact Hours: 3 credit hours and 3 contact hours

Catalog Description including pre- and co-requisites:

This course is a series of extended field trips into a selection of local ecosystems such as gorges, bogs, streams, and marshes. Students will analyze these ecosystems both as examples of each ecological situation and as areas managed in different ways by man. Natural history topics such as insects, aquatic life, migratory birds, glacial geology, and human interactions with the environment are studied in appropriate areas. (Also listed as BIO 245.)

II. Course Outcomes and Objectives

Student Learning Outcomes:

The student will:

- Demonstrate knowledge of ecological concepts (professional competency)
- Deliver an oral presentation (oral communication).
- Demonstrate information gathering skills (information resources)
- Demonstrate the ability to gather relevant information (reading, writing, information resources)
- Apply environmental concepts presented to real world situations (global concerns, citizenship).
- Demonstrate a broad awareness of environmental issues (global concerns, citizenship)
- Using personal reflection, convey their ethics and values about the environment, in various writing assignments. (ethics and values)

Relationship to Academic Programs and Curriculum:

Field Natural History serves as an elective for A.S. Environmental Studies, A.A.S. Natural Resources Conservation, A.A.S. Natural Resource Law Enforcement and because it is dual listed with BIO-245 also serves as a Science Elective. Field Natural History can also serve as a general elective provided that the prerequisites are satisfied.
**College Learning Outcomes Addressed by the Course:**
- X writing
- ___ computer literacy
- X oral communication
- X ethics/values
- X reading
- X citizenship
- ___ mathematics
- ___ critical thinking
- X global concerns
- X information resources

II. Instructional Materials and Methods

**Types of Course Materials:**

Students will use field guides, informational leaflets and bulletins, as well as internet resources.

**Methods of Instruction (e.g. Lecture, Lab, Seminar ...):**

Instruction will include: lecture, field experiences, and laboratory.

IV. Assessment Measures (Summarize how the college and student learning outcomes will be assessed):

Student understanding of course content will be assessed by their performance on quizzes and a final exam.

The reading, writing, and information resources competencies will be assessed using weekly research projects. The oral communication competency will be assessed through an oral presentation using a standard rubric. The global concerns, citizenship, and ethics/values competencies will be assessed using specifically designed exam questions as well as writing assignments.

V. General Outline of Topics Covered:

The course will cover forest development, ecological succession, shrub-land ecology, pond ecology, Wetland ecology (swamps, marshes, bogs), riparian ecology, riverine ecology, ravine ecology, paleoecology, glacial geomorphology, weather, winter ecology, invasive species, as well as Federal and NYS DEC wildlife and plant law when appropriate.